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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

HARRISON, CHANTE E

ART UNIT PAPER NUMBER

2672

DATE MAILED: 08/10/2004

22

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/432,113

Applicant(s)

SAITOU, NOBUHIRO

Examiner

Chante Harrison

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2 D.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. This action is responsive to communications: Amendment E, filed on 5/28/04.

This action is made FINAL.

2. Claims 1-20 are pending in the case. Claims 1, 5, 8-17 and 19 are independent claims. Claims 1, 5, 8-17 and 19 have been amended. Claim 20 has been added.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 5, 8, 9, 11, 14-17 and 19 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1, 5, 8, 9, 11, 14-17 and 19 reference "a criteria" which is not disclosed by the Applicants specification.

3. Claims 1, 5, 8-16 and 19 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to

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one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1, 5, 8-16 and 19 reference checking a criteria "while/during interactive movement/dragging" of a third object which is not disclosed by the Applicants specification.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 19 is rejected under 35 U.S.C. 102(e) as being anticipated by Tichomir Tenev et al., U.S. Patent 6,377,259.

As per independent claim 19, Tenev discloses displaying a graph (Fig. 1), dragging a node to change a location of the node (col. 10, ll. 14-18) and during the dragging checking a criteria against the dragging and when the checking determines that the location of the node is in proximity to a connector of an existing node in the graph (col. 10, ll. 30-35) automatically treating the connector as an insertion target designated by the dragging by displaying a new graph connector connecting the node to the existing node (col. 10, ll. 34-36, 46-49).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jean Camacho et al., U.S. Patent 5,278,951 and further in view of Tichomir Tenev et al., U.S. Patent 6,377,259.

As per independent claim 1, Camacho discloses displaying a first and second object connected with a first connector (FIG. 1), the objects and the connector displayed on a screen (abstract; col. 2, ll. 20-25), an interactive editing unit checking a criteria against movement of a third object (i.e. interactive movement achieved by selection of a position for insertion of the object; and the criteria is checked by comparison of the selected insertion point to the connection point) (col. 6, ll. 30-40) and automatically designating the first connector when the checking determines that the criteria is satisfied...(i.e. using the connector as the insertion point) (col. 6, ll. 30-40) and in response to the automatic designation automatically creating both a second connector to connect the first and third object and a third connector connecting the third and second objects when a third object is in a predetermined position relative to the first connector (col. 15, ll. 30-45; Fig. 9). Camacho fails to specifically disclose checking a criteria while the third object is being interactively moved, which Tenev discloses (col.

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10, ll. 15-18, 45-48). Camacho teaches performing node insertion/deletion by shifting elements using x/y and row/column coordinates. Tenev teaches processing a dragging event, which moves elements (i.e. nodes/links) by an input gesture or signal and identifies node position to modify the displayed graph (i.e. node link structure) layout. It would have been obvious to one of skill in the art to include an object moved by the input device as taught by Tenev with the disclosure of Camacho because Camacho teaches performing an insertion/deletion operation upon a user checking (i.e. selecting) the operation and the element to be processed.

As per dependent claim 2, Camacho discloses creating the second and third connectors when the first connector and the third object overlap (col. 16-17, ll. 45-20), in view of Tenev.

As per dependent claim 3, Camacho discloses judging whether a distance between the first and second objects will accommodate a third object and shifting one of the objects if the distance is insufficient (col. 14, ll. 55-65; col. 15, ll. 20-41), in view of Tenev.

As per dependent claim 4, Camacho discloses making the third object depend from the first and the second depend from the third if the second object depended from the first before the third object was inserted (Fig. 8 & 9 "H3"), in view of Tenev.

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As per independent claim 5, Camacho discloses the editing apparatus checks a selection criteria against the movement of the area and when the checking determines that the criteria is satisfied by the designated area overlapping the first connector the first connector is interactively selected... (col. 6, ll. 30-40; col. 16-17, ll. 45-20) and creating new connectors when the first connector is selected (col. 6, ll. 30-36; col. 15, ll. 27-35). The rejection as applied to independent claim 1 is included herein. Camacho fails to specifically disclose a user designating an area on the screen that is interactively moved on the display by a user, and during the interactive movement checking a selection criteria, which Tenev discloses (col. 10, ll. 15-18, 45-48). Camacho teaches performing node insertion/deletion by shifting elements using x/y and row/column coordinates. Tenev teaches processing a dragging event, which moves elements (i.e. nodes/links) by an input gesture or signal and identifies node position to modify the displayed graph (i.e. node link structure) layout. It would have been obvious to one of skill in the art to include an object moved by the input device as taught by Tenev with the disclosure of Camacho because Camacho teaches performing an insertion/deletion operation upon a user checking (i.e. selecting) the operation and the element to be processed.

As per dependent claim 6, Camacho discloses shifting the second object and displaying the third in a position where the second was displayed (col. 15, ll. 30-45; Fig. 8 & 9 "H3"), in view of Tenev. Although Camacho fails to disclose performing this step before the first connector was selected (col. 6, ll. 30-40), it would have been obvious to

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one of skill in the art to shift the objects and insert the new object before selecting the link to be modified because Camacho selects the portion of the graph to be modified, executes the layout of the graph and reconnects the objects with modified links.

As per dependent claim 7, Camacho discloses a virtual coordinate system in which each box displays one object (FIG. 2) and displaying each object in the coordinate system (col. 2, ll. 20-25) and locating each object using the coordinate system (col. 7, ll. 55-65), in view of Tenev.

As per independent claim 8, Camacho discloses displaying a plurality of second object connected to the first object (Fig. 2) and interactively checking a criteria against movement of a third object while it is being moved (col. 6, ll. 30-40) and collectively (col. 2, ll. 63-65) selecting a plurality of connectors (Fig. 10). Camacho fails to specifically disclose when the criteria is satisfied by the third object moving into proximity to the two or more connectors, which Tenev discloses (col. 10, ll. 4-8, 15-18). Camacho teaches the user selecting an element via input device and modifying the displayed tree structure after detecting the selected element and its including structure. Tenev teaches user selection of an element to be modified via a dragging event that is indicated by an appropriate gesture (i.e. 2D movement) or other signal. It would have been obvious to one of skill in the art to include the insertion of nodes by one of dragging or dropping in the disclosure of Camacho to increase user control of the

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editing process via manipulation of an input device. The rationale applied in the rejection of claim 1 is included herein.

As per independent claim 9, Camacho discloses a method implemented in the apparatus of claim 1. Therefore the rationale applied in the rejection of claim 1 is included herein.

As per independent claim 10, Camacho discloses a method implemented in the apparatus of claim 5. Therefore the rationale applied in the rejection of independent claim 5 is included herein.

As per independent claim 11, Camacho discloses a medium (col. 1, ll. 55-67) for implementing the method of claim 9. Therefore the rationale applied in the rejection of claim 9 is included herein.

As per independent claim 12, Camacho discloses a medium (col. 1, ll. 55-67) for implementing the method of claim 10. Therefore the rationale applied in the rejection of claim 10 is included herein.

As per independent claim 13, Camacho discloses designating a first connection by comparing a position of the first connection with positions of an insertion node or representation (col. 6, ll. 30-40), the first connection connecting a first and second

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displayed node (Fig. 1), inserting a node by creating a connection between the inserted node and the first node and another connection connecting the inserted node and the second node (Fig. 8 & 9 "H3"; col. 15, ll. 20-40). Camacho fails to specifically disclose designating a connection while the insertion node is being displayed while being moved by the input device, which Tenev discloses (col. 10, ll. 15-18, 45-48). Camacho teaches performing node insertion/deletion by shifting elements using x/y and row/column coordinates. Tenev teaches processing a dragging event, which moves elements (i.e. nodes/links) by an input gesture or signal and identifies node position to modify the displayed graph (i.e. node link structure) layout. It would have been obvious to one of skill in the art to include an object moved by the input device as taught by Tenev with the disclosure of Camacho because Camacho teaches performing an insertion/deletion operation upon a user checking (i.e. selecting) the operation and the element to be processed.

As per independent claim 14, Camacho discloses an apparatus (col. 1, ll. 55-67; col. 6, ll. 30-40). The rationale as applied to the rejection of claim 1 above is applied herein.

As per independent claim 15, Camacho discloses interacting with a user interface to designation among connectors of a displayed graph, a connector to be a target for inserting a node between edge connected nodes (col. 6, ll. 30-40; Fig. 8 & 9), automatically displaying new lines (col. 17, ll. 1-6), automatically undisplaying a line

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from the graph (Fig. 8 & 9), the displaying and undisplaying reflect changes to edges of the graph (Fig. 8 & 9). Camacho fails to disclose inserting a node by dragging the node over or near a line connecting the existing nodes and dropping the node onto or near a connector and checking a criteria during the dragging and selecting the connector when the dragging satisfies the criteria, which Tenev discloses (col. 10, ll. 4-8, ll. 15-18).

Camacho teaches the user selecting an element via input device and modifying the displayed tree structure after detecting the selected element and its including structure. Tenev teaches user selection of an element to be modified via a dragging event that is indicated by an appropriate gesture (i.e. 2D movement) or other signal. It would have been obvious to one of skill in the art to include the insertion of nodes by one of dragging or dropping in the disclosure of Camacho to increase user control of the editing process via manipulation of an input device.

As per independent claim 16, Camacho discloses storing a graph structure... (col. 1, ll. 55-67), displaying nodes (Fig. 1), displaying links connecting nodes (Fig. 1), adding a new node after displaying the structure (col. 2, ll. 20-25; col. 6, ll. 30-40), interactively selecting the displayed line (col. 6, ll. 30-40), adding to the graph structure new relationship data (col. 2, ll. 20-25), inserting a node by creating a connection between the inserted node and the first node and another connection connecting the inserted node and the second node (Fig. 8 & 9 "H3"; col. 15, ll. 20-40). The rationale as applied to above claim 15 is applied herein.

As per independent claim 17, Camacho discloses storing a graph structure comprising node variables and information logically interrelating the node variables (col. 1, ll. 55-65; Fig. 1), displaying graphical nodes and lines connecting the nodes (col. 2, ll. 20-25; col. 3, ll. 55-60; Fig. 2), where a new node is unrelated to any other node variables and the new node corresponds to a third graphical node (Fig. 6), graphical nodes correspond to node variables and graphical lines correspond to information logically relating the node variables (col. 2, ll. 14-25; col. 15, ll. 15-45), selecting a first line connecting a first and second node and representative of information relating the first and second node (col. 6, ll. 30-40) . The rationale as applied to claim 15 is applied herein.

As per dependent claim 18, Camacho discloses interactively selecting the first connector (col. 6, ll. 25-45). Camacho fails to disclose inserting a node by dragging the node over or near a line connecting the existing nodes and dropping the node onto or near the line, which Tenev discloses (col. 10, ll. 4-8, 15-18). Camacho teaches the user selecting an element via input device and modifying the displayed tree structure after detecting the selected element and its including structure. Tenev teaches user selection of an element to be modified via a dragging event that is indicated by an appropriate gesture (i.e. 2D movement) or other signal. It would have been obvious to one of skill in the art to include the insertion of nodes by one of dragging or dropping in the disclosure of Camacho to increase user control of the editing process via manipulation of an input device.

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As per independent claim 20, Camacho discloses an apparatus (col. 1, ll. 55-67; col. 6, ll. 30-40). The rationale as applied to the rejection of claim 1 above is applied herein.

Response to Arguments

1. Applicant's arguments filed 5/28/04 have been fully considered but they are not persuasive.

Applicant traverses the rejection of claims in view of both Camacho and Tenev, based on the amendment to the claims incorporating a selection "criteria" used to check overlap of a displayed element while dragging a user manipulated object, which Applicant suggests neither Camacho nor Tenev discloses.

In reply, Examiner found neither a "criteria" or the interactive monitoring of the object position as it is dragged by a user to be disclosed in the Applicants specification. Additionally, Camacho teaches achieving interactive movement by selection of a position for insertion of the object; and a criteria is checked by comparison of the selected insertion point to the connection point (col. 6, ll. 30-40) as well as detecting/determining when an object to be inserted overlaps an existing connector (col. 16-17, ll. 45-20). Tenev also discloses checking a criteria against the dragging and when the checking determines that the location of the node is in proximity to a connector of an existing node in the graph (col. 10, ll. 30-35). Therefore the rejections in view of Camacho and Tenev are maintained.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

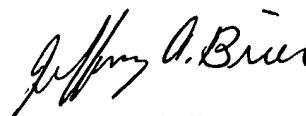
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chante Harrison whose telephone number is 703-305-3937. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on 703-305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chante Harrison
Examiner
Art Unit 2672

Ceh


JEFFERY BRIER
PRIMARY EXAMINER